CLAIMS

1. A method for compressing image data, comprising the steps of:

determining that a continuous tone image data set contains a single intensity color plane;

determining an initial compressed output data segment that contains one segment of a compressed output data set for the beginning of the image data set based upon a constant value contained within each pixel of the single intensity color plane;

determining a middle compressed data segment that contains one middle data segment that is replicated to produce a middle compressed output data set for the compressed output data set, wherein the middle compressed output data set comprises the compressed output for the middle section of the image data set and the middle compressed data set is generated by repeating the middle compressed data segment;

determining a final output data segment for the compressed output data set, wherein the final output data block comprises the finish sequence of compressed output data set for the image data set; and

outputting the compressed output data set.

2. The method according to claim 1, wherein the compressed output data set conforms to the JPEG encoding algorithm.

3. The method according to claim 1, wherein the continuous tone image data set comprises a plurality of meta-data indicators that each indicate the presence of data within each pixel of the image data set and wherein the step of determining that a continuous tone image data set contains a single intensity color plane comprises the step of determining if the image data set contains blank image data based upon examination of the plurality of meta-data indicators.

4. The method according to claim 3, wherein the step of determining an initial compressed output data segment comprises the step of retrieving, in response to determining that the image data set contains blank image data, an initial compressed output data segment that corresponds to a blank image.

5. A system for compressing image data, comprising:

a single intensity image detector for determining that a continuous tone image data set contains the same value in each pixel; and

a single intensity image data producer for:

determining an initial compressed output data segment that contains one segment of a compressed output data set for the beginning of the image data set based upon a constant value contained within each pixel of the single intensity color plane;

determining a middle compressed data segment that contains one middle data segment that is replicated to produce a middle compressed output data set for the compressed output data set, wherein the middle compressed output data set comprises the compressed output for the middle section of the image data set and the middle compressed data set is generated by repeating the middle compressed data segment;

determining a final output data segment for the compressed output data set, wherein the final output data block comprises the finish sequence of compressed output data set for the image data set; and

outputting the compressed output data set.

6. The system according to claim 5, wherein the compressed output data set conforms to the JPEG encoding algorithm.

7. The system according to claim 5, wherein the continuous tone image data set comprises a plurality of meta-data indicators that each indicate the presence of data within each pixel of the image data set and wherein the single intensity color plane identifier determines that the continuous tone image data set contains the single intensity color plane by determining if the image data set contains blank image data based upon examination of the plurality of meta-data indicators.

8. The system according to claim 7, wherein the data encoder determines an initial compressed output data segment by retrieving, in response to determining if the image data set contains blank image data, an initial compressed output data segment that corresponds to a blank image.

9. A computer readable medium including computer instructions for compressing data, the computer instructions comprising instructions for:

determining that a continuous tone image data set contains a single intensity color plane;

determining an initial compressed output data segment that contains one segment of a compressed output data set for the beginning of the image data set based upon a constant value contained within each pixel of the single intensity color plane;

determining a middle compressed data segment that contains one middle data segment that is replicated to produce a middle compressed output data set for the compressed output data set, wherein the middle compressed output data set comprises the compressed output for the middle section of the image data set and the middle compressed data set is generated by repeating the middle compressed data segment;

determining a final output data segment for the compressed output data set, wherein the final output data block comprises the finish sequence of compressed output data set for the image data set; and

outputting the compressed output data set.

10. The computer readable medium according to claim 9, wherein the compressed output data set conforms to the JPEG encoding algorithm.

11. The computer readable medium according to claim 9, wherein the continuous tone image data set comprises a plurality of meta-data indicators that each indicate the presence of data within each pixel of the image data set and wherein the instructions for determining that a continuous tone image data set contains a single intensity color plane comprises instructions for determining if the image data set contains blank image data based upon examination of the plurality of meta-data indicators.

12. The computer readable medium according to claim 11, wherein the instructions for determining an initial compressed output data segment comprises instructions for retrieving, in response to determining that the image data set contains blank image data, an initial compressed output data segment that corresponds to a blank image.